REMARKS

Claims 1-20 were pending in this application.

Claims 1-20 have been rejected.

Claims 1, 6, 9, 14 and 17 have been amended as shown above.

Claims 5, 7, 8, 13, 15 and 16 have been canceled.

New Claims 21-27 have been added.

Claims 1-4, 6, 9-12, 14 and 17-27 remain pending in this application.

Reconsideration of the claims is respectfully requested.

I. REJECTION UNDER 35 U.S.C. § 102

The Office Action rejects Claims 1-2 and 17-18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,201,043 to Crawford et al. ("*Crawford*"). This rejection is respectfully traversed.

A cited prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is

found in a single cited prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

Crawford recites a selectable alignment checker for detecting a misaligned data reference. The selectable alignment checker includes two mode bits. One bit is called the AC (alignment check) bit and the other bit is called the AM (alignment masking) bit. (*Col. 6, Lines 37-47*). The AC bit enables the generation of faults if the memory reference is to a misaligned address at the application level. (*Col. 6, Lines 51-59*). The AM bit controls whether the AC bit can allow faults or not at the operating system level. (*Col. 7, Lines 29-37*). The AM and AC bits must both be set to "1" to generate a misaligned fault. (*Col. 8, Lines 51-53*).

Crawford lacks any mention of "a data protection unit capable of determining if said load instruction access a restricted area of memory and, in response to a determination that said load instruction accesses a restricted area of memory, determining if said load instruction is speculative," as recited in independent Claims 1 and 17. *Crawford* further lacks any mention of "exception control circuitry ... capable of, in response to a determination that said load instruction is speculative, causing said data processor to dismiss said load instruction," as recited in Claims 1 and 17.

As a result, the Office Action fails to show that *Crawford* anticipates Claims 1 and 17 (and their dependent claims). Accordingly, the Applicants respectfully request that the Examiner withdraw the § 102(b) rejections of Claims 1-2 and 17-18.

II. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 9-10 under 35 U.S.C. § 103(a) as being unpatentable over *Crawford*. The Office Action rejects Claims 3-8, 11-16 and 19-20 under 35 U.S.C. § 103(a) as being unpatentable over *Crawford* in view of U.S. Patent No. 5,915,117 to Ross et al. ("*Ross*"). These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

As described above, the Office Action fails to show that *Crawford* discloses, teaches or suggests "a data protection unit capable of determining if said load instruction access a restricted area of memory and, in response to a determination that said load instruction accesses a restricted area of memory, determining if said load instruction is speculative," as recited in independent Claim 9. *Crawford* further lacks any mention of "exception control circuitry ... capable of, in response to a determination that said load instruction is speculative, causing said data processor to dismiss said load instruction," as recited in Claim 9. As a result, the Office Action fails to establish a *prima facie* case of obviousness against Claim 9 (and its dependent claims). Accordingly, the Applicants respectfully request withdrawal of the § 103(a) rejection of Claims 9-10.

With respect to the rejection of Claims 3-8, 11-16 and 19-20, the Office Action cites *Ross* as teaching the determination of a load being speculative. (*See, Office Action, Page 3*). *Ross* recites a computer architecture for deferral of exceptions on speculative instructions. If a load instruction references a restricted area of memory, and therefore generates an exception, a determination is made whether the load instruction is speculative. (*Col. 7, Lines 16-28 and Lines 46-48*). If the load

instruction is not speculative, an exception occurs. (*Col. 7, Lines 49-60*). If the load instruction is speculative, a determination is made whether a deferral can be performed. (*Col. 7, Lines 61-63*). If not, an exception occurs. (*Col. 8, Lines 24-31*). If so, a deferred exception indicator is written into the speculative instruction's destination. (*Col. 9, Lines 1-18*). A non-speculative instruction that reads a deferred exception indicator generates an exception. (*Col. 3, Lines 49-60*).

Ross lacks any mention of "exception control circuitry ... capable of, in response to a determination that said load instruction is speculative, causing said data processor to dismiss said load instruction," as recited in independent Claims 1, 9 and 17, from which Claims 3-8, 11-16 and 19-20 respectively depend. As a result, the Office Action fails to establish a *prima facie* case of obviousness against Claims 1, 9 and 17 (and their dependent claims). Accordingly, the Applicants respectfully request withdrawal of the § 103(a) rejection of Claims 3-8, 11-16 and 19-20.

III. NEW CLAIMS

The Applicants have added new Claims 21-27. The Applicants respectfully submit that no new matter has been added. The Applicants respectfully request entry and full allowance of Claims 21-27.

IV. CONCLUSION

As a result of the foregoing, the Applicants assert that the remaining claims in the application are in condition for allowance and respectfully requests an early allowance of such claims.

SUMMARY

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicants respectfully invite the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: May 24, 2004

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